Claims

We claim:

1. 1 A message-passing system, comprising: 2 a first client system configured to transmit a message packet containing a priority a. 3 to a second client system; and 4 b. a second client system configured to receive the message packet from the first 5 client system and process the message packet based on the priority. 2. 1 The message-passing system of claim 1, wherein the message packet is transmitted from 2 the first client system to the second client system according to a transport protocol. 3. The message-passing system of claim 2, wherein the transport protocol is TCP/IP. 1 1 4. The message-passing system of claim 2, wherein the transport protocol is NetBUI. 5. 1 The message-passing system of claim 1, wherein the message packet is formatted 2 according to an SGML standard. 1 6. The message-passing system of claim 5, wherein the SGML standard is XML. 7. 1 The message-passing system of claim 6, wherein the message packet comprises text data. 8. 1 The message-passing system of claim 6, wherein the message packet comprises a virtual 2 object.

The message-passing system of claim 1, further comprising a first message server coupling the first client system to the second client system, the first message server providing a communication path between the first client system and the second client system.

- 10. The message-passing system of claim 9, further comprising a log server coupled to the first message server, the log server configured to store log data for the message packet.
- 1 11. The message-passing system of claim 9, further comprising a diagnostics server coupled to the first message server, the diagnostics server configured to store log data for the message packet.
- 1 12. The message-passing system of claim 9, further comprising:

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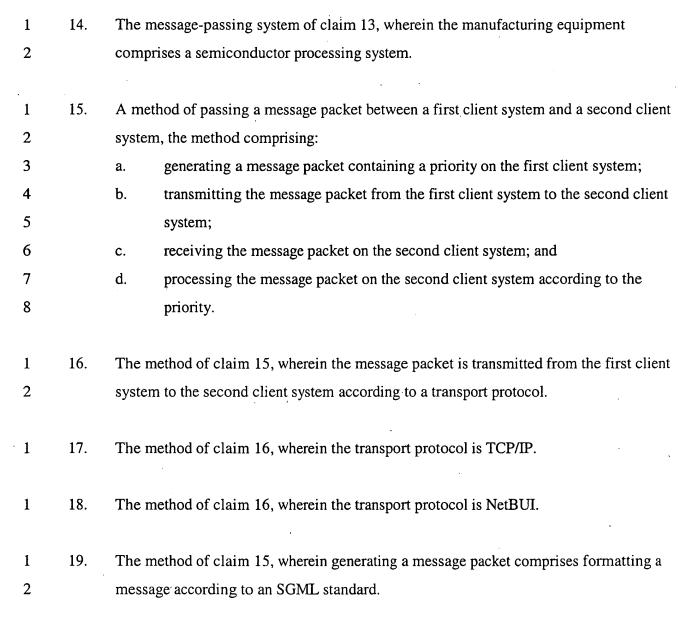
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- a second message server coupled to the first client system and the second client system, the second message server providing a communication path between the first client system and the second client system; and
- b. a load balancer coupling the first client system to both the first message server and the second message server, the load balancer further coupling the second client system to both the first message server and the second message server.
- 13. The message-passing system of claim 1, further comprising a manufacturing equipment having an associated parameter, the manufacturing system coupled to the first client system, wherein the first client system is configured to monitor the associated parameter, generate the priority based on the parameter, generate the message packet containing the priority, and transmit the message packet to the second client system.



- 1 20. The method of claim 19, wherein the SGML standard is XML.
- 1 21. The method of claim 20, wherein the message packet comprises text data.
- 1 22. The method of claim 20, wherein the message packet comprises a virtual object.

1 23. The method of claim 15, further comprising storing log data for the message packet. 24. 1 The method of claim 15, wherein transmitting the message packet comprises: 2 a. transmitting the message packet to a message server based on a load of the 3 message server; and 4 b. transmitting the message packet from the message server to the second client 5 system. 25. 1 The method of claim 15, wherein generating a message packet comprises encrypting a 2 message and including the encrypted message in the message packet. 1 26. The method of claim 25, wherein processing the message packet comprises decrypting 2 the encrypted message in the message packet. 1 27. The method of claim 15, further comprising before the step (a): 2 a. reading a parameter associated with a manufacturing equipment; and 3 b. generating the priority based on the parameter. 28. 1 A sending client system configured to transmit a message packet containing a priority to a 2 receiving client system, the receiving client system configured to process the message 3 packet based on the priority. 29. 1 The sending client system of claim 28 comprising a messaging module, the messaging 2 module configured to assign a priority to a message to form the message packet, the 3 messaging module further configured to transmit the message packet to the receiving

client system according to a transport protocol.

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- 1 30. The sending client system of claim 29, wherein the transport protocol is TCP/IP.
- 1 31. The sending client system of claim 29, wherein the transport protocol is NetBUI.
- 1 32. A receiving client system configured to receive a message packet containing a priority
- from a sending client system, the receiving client system configure to process the
- 3 message packet based on the priority.
- 1 33. The receiving client system of claim 32 comprising a messaging module, the messaging
- 2 module configured to receive the message packet from a sending client system according
- 3 to a transport protocol, the messaging module further configured to process the message
- 4 packet based on the priority.
- 1 34. The receiving client system of claim 33, wherein the transport protocol is TCP/IP.
- 1 35. The receiving client system of claim 33, wherein the transport protocol is NetBUI.